

Of the canals already cut, or in such forwardness as not to admit of an alteration, I consider them in the same view as rivers; but all future works to be guided by the before-mentioned criterion, of comparing the expence of transferring cargoes, with the interest of the money saved, by adopting the small, instead of large boats.

CHAP.

CHAP. V.

OF THE PARTICULAR CONSTRUCTION OF THE BOATS, AND
THEIR APPLICATION TO VARIOUS SITUATIONS.

HOWEVER novel the formation of the boats may appear, at first sight, I hope to be able to exhibit sufficient reason for the particular mode of constructing them: I therefore beg the accurate attention of the reader to this part of the combination, as on this especially I conceive the whole system of small canals is supported.

I have already assigned reason for the boats being small; I have also hinted at the necessity of their passing speedily over the machinery: I must again repeat, and impress this consideration, that the trade being divided into small portions, will, consequently, create a great number of movements at the machinery; it is therefore indispensably necessary, that such movements should be performed with the greatest possible expedition, in order that an important trade may be transacted.

In deliberating on this part of the operation, I found it would be the means of great loss of time, if the boats were to be placed on any kind of carriage, or cradle, for the purpose of passing the plane; that such carriage or cradle would also prevent one movement on the machinery, which is the great means of expedition*; hence, to prevent loss of time, and that the boats

* The rotatory movement of the leading chains, which shall be particularly described in the first machine.

might

